

ABSTRACT

The invention provides soybean plants having a novel determinant, *Rps8*, for resistance to *Phytophthora sojae*. The invention also provides methods for identifying germplasms that are either heterozygous or homozygous for *Rps8* using marker assisted selection. Genetic markers with known chromosomal location that are associated with the *Rps8* gene are used to confirm *Rps8*-derived *Phytophthora sojae* resistance in germplasms. Marker assisted selection also used when introgressing *Rps8*-derived soybean *Phytophthora sojae* resistance into non-resistant soybean germplasm or less resistant soybean germplasms.